

IN THE CLAIMS:

1. (currently amended) An insulation-displacement connector connecting apparatus (100) for connecting an insulation-displacement connector (20) having a housing (22), at least one insulation-displacement terminal (23) mounted in the housing (22) and configured for connection with a plurality of wires (W; WH), and a cover (21) to be mounted on the housing (22), comprising:

a pressure-receiving table (140; 400) for at least partly receiving the housing (22) with the insulation-displacement terminal (23) mounted therein;

a press unit (200; 500) comprising, as connection-assisting parts (223-226; 450; 460; 470), a wire pushing device (223; 460) configured for directly engaging and pushing the wires (W; WH) mounted in the housing (22) on the pressure-receiving table (140; 400) along a pushing axis and into the insulation-displacement terminal (23) mounted in the housing (22) and a cover holder (224; 470) offset transversely from the wire pushing device relative to the pushing axis and configured for holding the cover (21) of the insulation-displacement connector (20) to mount the cover (21) on the housing (22) after the wires (W; WH) are pushed into the insulation-displacement terminal (23), the press unit (200; 500) further comprising means for moving the connection-assisting parts transverse to the pushing axis for selectively aligning one of the wire pushing devices and the cover holder with the pushing axis and for subsequently pressing the respective connection-assisting parts (223-226; 450; 460; 470) toward the pressure-receiving table (140; 400); and

a drive controlling means (310; 320) for controllably driving the connection assisting parts transverse to the pushing axis and controllably driving the press unit (200; 500) along the pushing axis so as to sequentially press the wire pushing device (223; 460) and the cover holder (224; 470).

2. (currently amended) An insulation-displacement connector connecting apparatus according to claim 1, wherein the press unit (200; 500) further comprises, as a connection-assisting part (223-226; 450; 460; 470), a wire checking device (222; 450) for checking the wires (W; WH) before the wires (W; WH) are pushed by the wire pushing device (223; 460), and the drive controlling means (310; 320) comprises a discriminating portion for judging (S6) whether a state of the wires (W; WH) is satisfactory when the wire checking device (222; 450) of the press unit (200; 500) is driven, the driving control means (310; 320) permitting (S8) the press unit (200; 500) to drive the wire pushing device (223; 460) and the cover holder (224; 470) if the discriminating portion judges (S6) that the state of the wires (W; WH) is satisfactory and hinders (S7) the operation of the press unit (200; 500) if the discriminating portion judges (S6) that the state of the wires (W; WH) is unsatisfactory.

3. (currently amended) An insulation-displacement connector connecting apparatus according to claim 1, wherein the pressure-receiving table (140; 400) is movable with respect to a casing (510) of the press unit (200; 500) between a mounting position where the wires (W; WH) can be mounted and a pressure-receiving position where the pressure-receiving table (140; 400) receives pressure from the press unit (200; 500).

4. (currently amended) An insulation-displacement connector connecting apparatus according to claim 1, wherein the press unit (200; 500) comprises:

a press (210; 540) substantially directly above the pressure-receiving table (140; 400) for performing a pressing operation,

a reciprocally movable unit (220; 600) for carrying the connection-assisting parts (223-226; 450; 460; 470) and reciprocally movable within a range of a specified stroke,

a switching device (230; 620) for switching the respective connection-assisting parts (223-226; 450; 460; 470) to a pressing position in the press (210; 540) via the reciprocally movable unit (220; 600) in an order of the wire pushing device (223; 460) and the cover holder (224; 470), and

a transmitting means (211; 212; 600) for transmitting a driving force of the press (210; 540) to the connection-assisting part (223-226; 450; 460; 470) at the pressing position.

5. (currently amended) An insulation-displacement connector connecting apparatus according to claim 4, wherein the reciprocally movable unit (220) comprises a shank (211) detachably mountable on a shank holder (212) of the press (210), and an elevatable block (227) for each of the connection-assisting parts (223-226) and being individually movable towards and away from the pressure-receiving table (140).

6. (currently amended) An insulation-displacement connector connecting apparatus according to claim 4, wherein the reciprocally movable unit (600) comprises an elevatable plate (602) adapted to carry the respective connection-assisting parts (450; 460; 470) and being directly driven by the press (540) to move towards and away from the pressure-receiving table (140).

7. (currently amended) An insulation-displacement connector connecting apparatus according to claim 6, wherein the press unit (500) is releasably mounted to the pressure-receiving table (400) fixedly mounted on a wire assembling board (1).

8. (currently amended) An insulation-displacement connector connecting apparatus according to claim 1, wherein the pressure-receiving table (140; 400) and the press unit (200; 500) are positioned with respect to each other by means of at least one pin (144; 602a) provided on one (140; 500) of the pressure-receiving table (140; 400) and

the press unit (200; 500) and by a corresponding recess (144a; 404c) provided on the other (200; 400) of the pressure-receiving table (140; 400) and the press unit (200; 500).

9. (cancelled).

10. (cancelled).

11. (currently amended) An insulation-displacement connector connecting apparatus (100) for connecting an insulation-displacement connector (20) having a housing (22), at least one insulation-displacement terminal (23) mounted in the housing (22) and configured for connection with a plurality of wires (A; WH), and a cover (21) to be mounted on the housing (22), comprising:

a press (210; 540) movable along a first axis for performing a pressing operation;

a pressure-receiving table (140; 400) having a housing-receiving portion (140c; 404a) configured for receiving the housing (22) with the insulation-displacement terminal (23) mounted therein, the pressure-receiving table (140; 400) being disposed such that the housing-receiving portion (140c; 404a) is substantially aligned with the first axis;

a plurality of connection assisting parts (223-226; 450; 460; 470), at least that are different from one another, one of said different connection assisting parts (223-226; 450; 460; 470) being disposed substantially on said first axis and between the pressure-receiving table (140; 400) and the press (210; 540); and

a reciprocally movable unit (220; 600) connected to the different connection-assisting parts (223-226; 450; 460; 470) and operative for moving the different connection assisting parts (223-226; 450; 460; 470) along a second axis substantially perpendicular to said first axis for positioning selective ones of said different connection assisting parts (223-226; 450; 460; 470) in line with the first axis for performing different specified

connection assisting functions on the housing (22) and the insulation-displacement terminal (23) on the pressure receiving table (140; 400).

12. (currently amended) The insulation-displacement connector connecting apparatus of claim 11, wherein the pressure-receiving table (140) is selectively movable along a third axis substantially perpendicular to said first and second axes from a mounting position where the housing-receiving portion (140e) is offset from said first axis and a pressure-receiving position where said housing-receiving portion (140e) is aligned with said first axis.

13. (currently amended) The insulation-displacement connector connecting apparatus of claim 11, wherein the connection-assisting parts comprise a wire pushing device (223; 460) configured for directly engaging and pushing the wires (W; WH) into the insulation-displacement terminal (23) mounted in the housing (22) on the pressure-receiving table (140; 400).

14. (currently amended) The insulation-displacement connector connecting apparatus (100) of claim 13, wherein the connection-assisting parts further comprise a cover holder (224; 470) for holding the cover (21) of the insulation-displacement connector (20) and mounting the cover (21) on the housing (22) after the wires (W; WH) are pushed into the insulation-displacement terminal (23).

15. (currently amended) The insulation-displacement connector connecting apparatus of claim 14, wherein the connection-assisting parts further comprise a wire checking device (222; 450) for checking the wires (W; WH) before the wires (W; WH) are pushed by the wire pushing device (223; 460), and the drive controlling means (310; 320) comprises a discriminating portion for judging (S6) whether a state of the wires (W; WH) is satisfactory when the wire checking device (222; 450) of the press unit (200; 500) is driven, the driving control means (310; 320) permitting (S8) the press unit (200;

500) to drive the wire pushing device (223; 460) and the cover holder (224; 470) if the discriminating portion judges (S6) that the state of the wires (W; WH) is satisfactory and hinders (S7) the operation of the press unit (200; 500) if the discriminating portion judges (S6) that the state of the wires (W; WH) is unsatisfactory.